

ARKHPOV, N.N.; KARPACHEV, P.S.; MAYZEL', M.M., doktor tekhn. nauk,  
prof.; PLEVAKO, N.A.; UDODOVSKIY, A.N.; kand. tekhn. nauk.  
retsenzent; RYZHOVA, L.P., red. izd-va; EL'KIND, V.D.,  
tekhn. red.

[Fundamentals of the design and construction of standard  
machines and devices for light industry] Osnovy konstrui-  
rovaniia i rascheta tipovykh mashin i apparatov legkoi  
promyshlennosti. [By] N.N.Arkhippov i dr. Pod red. M.M.  
Maizelia. Moskva, Mashgiz, 1963. 599 p. (MIRA 16:7)  
(Machinery--Design and construction )  
(Instruments)

UDOI, V.A.

Experience relaying central broadcasts to the Novosibirsk receiving station. Vest. sviazi 17 no.5:21-22 My '57. (MLRA 10:5)

1. Rukovoditel' remontno-profilakticheskoy gruppy priyemnoy radiostantsii Irkutskogo oblastnogo radiotsentra.  
(Novosibirsk--Radio relay systems)

UDOLSKAYA, N. L.

Study of the elements of mineral nutrition as factors in

PROCESSES AND PROPERTIES

CHANGING THE DROUGHT RESISTANCE OF PLANTS

N. L. Udolskaya. Comp. read. and at. v. K. S. S. [N. 8.1. 2, 45 din. English 47-8] (1934).--Investigations were carried out by the vegetative and field methods with spring-wheat varieties having different lengths of vegetative period and belonging to different types with respect to drought resistance. Fertilizers applied in the vegetative test were  $\text{Na}_2\text{HPO}_4$  and  $\text{Ca}(\text{NO}_3)_2$ , (0.25 g. of  $\text{H}_2\text{PO}_4^-$  and N per 7 kg. of abt. dry earth). In the field test superphosphate and  $(\text{NH}_4)_2\text{SO}_4$ , (60 kg. of  $\text{H}_2\text{PO}_4^-$  and N per hectare) were used. The variety *Pseudo-kostinum* (003) showed the greatest receptivity to phosphate fertilizers. The yield of *Cerealia* 04972 decreased in all cases with fertilizers. Morphological changes took place. P stimulated the development of the principal shoot and gave the plant a more compact structure whereas N led to an increased formation of lateral shoots. Measurements of the  $\text{H}_2\text{O}$  balance in the leaves during daytime showed that plants which had received P had a uniform  $\text{H}_2\text{O}$  balance with a lower general  $\text{H}_2\text{O}$  content, the usual drop of the  $\text{H}_2\text{O}$  content curve during the hot hrs. not taking place. Assimilation during drought in the day hrs. was more vigorous in plants which had received P than in control plants or those which had received N fertilizers. The  $\text{H}_2\text{O}$ -retaining capacity was considerably increased by P fertilizers. It is concluded that the action of P on plants consists largely in the heightening of the  $\text{H}_2\text{O}$ -retaining capacity of the plasma, which guarantees the normal course of assimilation in conditions of insufficient moisture.

W. J. Peterson

ASIN 354 METALLURGICAL LITERATURE CLASSIFICATION

USSR/General Biology - Genetics. Genetics of Plants.

B

Abs Jour : Ref Zhur Biol., No 6, 1959, 23666

Author : Udol'skaya, N.L.

Inst : Kazakhstan University

Title : The Control of the Form Development Process of Wheat.

Orig Pub : Uch. zap. Kazakhst. un-ta, 1957, 29, 23

Abstract : Various varieties of soft and hard wheats and their hybrids were sown on elevated (2300 m above sea level) points of the Alma-Ata State Selective Station. According to the data of the author, the elevated conditions induce lengthening of the spike, increase of number of flowers in the spikelets, and ramification of the spike. After 4 years of selection under elevated conditions, considerable lengthening of the spike was obtained. For example, in the hybrid "Lyutestsens" 47 x

Card 1/2

DARKANBAYEV, T.B.; UDOL'SKAYA, N.L.

Encyclopedic work on plant physiology ("Handbook of plant physiology" [in German]. Reviewed by T.B.Darkanbaev, N.L.Udol'skaya). Vest.AN Kazakh.SSR 16 no.6:85-87 (MIRA 13:?) Je '60.  
(Plant physiology)

UDOL'SKAYA, Nadezhda L'vovna

[Selection of spring wheat] Seleksiia iarovoii pshenitsy.  
Alma-Ata, Kazakhskoe gos.izd-vo, 1961. 194 p.  
(MIRA 16:4)  
(Wheat breeding)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

ASHKENAZI, Genrikh Isaakovich; UDOL'SKIY, Aleksandr Konstantinovich;  
BRANDENBURGSKAYA, E.TZ., red.

[Electrical equipment of clubs] Elektrooborudovanie klubov.  
Moskva, Energiia, 1964. 79 p. (Biblioteka elektromontera,  
no.143) (MIRA 17:12)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

UDOL'SKIY, D. M.

Udol'skiy, D. M. "Dry acid press," Trudy Otd. kormleniya (Kazakh. filial Vsesoyuz. akad. s.-kh. nauk im Lenina, In-t Zhivotnovodstva), Issue 1, 1948, pp. 58-62

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

UDOL'SKIY, D. M.

Udol'skiy, D. M. "Effect of chalk and ashes on field and wood plants on the digestibility of ration and mineral change in young pigs," Trudy Otd. kormleniya (Kazakh. filial Vsesoyuz. akad. s.-kh. nauk im Lenina, In-t Zhivotnovodstva), Issue 1, 1948, pp. 63-68

SO: U-3264, 10 April 53 (Letopis 'Zhurnal 'nykh Statey, No. 4, 1949).

Pa. 173T77

UDOTOV, K., A.,

USSR/Metals - Welding

Nov 50

"Highly Efficient Welding Methods Developed by  
TsNIITMASH" K. A. Udotov, Engr

"Avtogen Delo" No 11, pp 8-14

Work of Welding Sec, Cen Sci Res Inst of Technol  
and Mach Bldg (Min of Heavy Mach Bldg) on: new  
technological processes; equipment for automatic  
welding under flux; electrodes for welding low-C  
and alloy steels; equipment for mechanized fabri-  
cation of electrodes; resistance welding.

173T77

UDOTOV, K. A., BRINBERG, I. I.

Electric Welding.

Instrument and equipment for automatic electric-arc welding of the Central Scientific Research Institute of the Technology of Machine Construction.  
Vest. mash. 31 no. 11, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September 1956? Uncr.

232T79

USSR/Metallurgy - Welding, Application, Turbines

cation, Sep 52

"Faced Blades of Hydraulic Turbines," I. R. Kryannin, Cand Tech Sci, K. A. Udotov, L. M. Karovinskij, Engineers, Stalin Prize Laureates, V. A. Lapidus, Cand Tech Sci

"Avtogen Delo" No 9, pp 17-21

Discusses technology of facing runner blades made of carbon or low-alloy steel with sheets of austenitic Cr-Ni-Ti steel. Facing sheets are fastened to blades with elec rivets and

232T79

by welding along their perimeter with simultaneous welding to blade body. Technology was developed in connection with sharp increase in demands for runner blades of hydraulic turbines and necessity of finding more economical method for their fabrication, instead of presently used casting out of stainless steel. Cost was reduced by 41%.

232T79

UEOV, E.

UEOV, E. Our bitumen quality and our standards. p. 319.

Vol. 4, No. 8/9, Aug./Sept. 1956.

CESTE I MOSTOVI

TECHNOLOGY

Zagreb, Yugoslavia

See: East European Accession, Vol. 6, No. 2, February 1957

NIKOLAYEV, G.M., inzh.; UDOV, V.A., inzh.

Frequency manipulator for checking receivers. Vest. sviazi  
21 no.1:11-13 Ja '61. (MIRA 15:5)

1. Radiostantsiya Irkutskogo radiotsentra.  
(Radio--Testing)

UDOV, V.M. (Yaremcha, Stanislavskoy oblasti)

Treating spontaneous gangrene by circular and conduction novocaine  
blocks maintained by cutaneous drip. Vrach.delo no.2:185-186  
F '56. (MLRA 9:?)

(GANGRENE) (NOVOCAIN)  
(INJECTIONS, HYPODERMIC)

UDOV, Ye.

Improve in every way possible the technical operation of vessels.  
Mor. flot 25 no.5:30-32 My '65. (MIRA 18:5)

1. Nachal'nik sluzhby sudovogo khozyaystva Azovskogo upravleniya  
uglerudovoznogo flota.

UDOVC, Vladimir

Osteogenesis imperfecta. Zdrav. vestn. 34 no.3:70-76 '65.

1. Klinicna bolnišnica za porodništvo in zenske bolezni v Ljubljani (predstojnik: Prof. dr. Franc Novak); Klinicna bolnišnica za otroške bolezni v Ljubljani (predstojnik: Prof. dr. Leo Matajc).

L 58467-65 EWA(k)/FBD/EWG(r)/EWT(1)/EWT(m)/EEC(k)-2/EEC(t)/T/EWP(t)/  
EEC(b)-2/EWP(k)/EWP(b)/EWA(m)-2/EWA(h) Pm-4/Pn-4/Po-4/Pf-4/Peb/Pi-4/P1-4  
SCTB/IUP(c) WG/JD/JG/GG

ACCESSION NR: AP5014193

UR/0386/65/001/002/0003/0007

AUTHOR: Voron'ko, Yu. K.; Kaminskiy, A. A.; Korniyenko, L. S.; Osiko, V. V. 64  
Prokhorov, A. M.; Udovenchik, V. T. 63 B

TITLE: Investigation of the stimulated emission in  $\text{CaF}_2:\text{Nd}^{3+}$  crystals (type II)  
at room temperature 24

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.  
Prilozheniya, v. 1, no. 2, 1965, 3-7, and insert A 21

TOPIC TAGS: neodymium, calcium compound, stimulated emission, paramagnetic laser,  
room temperature laser 25

ABSTRACT: The present work, a continuation of earlier research (ZhETF, 46, 1964,  
386) in which the authors obtained stimulated emission at  $\sim 1.047 \mu$  in  $\text{CaF}_2:\text{Nd}^{3+}$   
(type I) crystals at 300K, gives preliminary results for laser action at  $\sim 1.0885 \mu$   
in  $\text{CaF}_2:\text{Nd}^{3+}$  (type II) crystals at 300K. Type II crystals, unlike type I crystals,  
contain oxygen ions in the structure of their neodymium optical centers. The working crys-  
tals, which had 0.2—0.5%  $\text{Nd}^{3+}$  concentrations, were in the form of cylindrical rods  
having polished ends with an accuracy of  $\pm 15''$ . The diameter and length of the rods  
were  $\sim 6.0$  mm and 75 mm, respectively. The optical resonator consisted of externally

Cord 1/2

L 58467-65  
ACCESSION NR: AP5014193

mounted confocal dielectric mirrors (radius of curvature, 500 mm; diameter, 40 mm; transmittivity, ~2% at 1.06 μ). An IFF-800 xenon lamp was used for pumping. Laser action resulted from the  $^4F_{3/2} \rightarrow ^4I_{11/2}$  transition. The lifetime of the excited  $^4F_{3/2}$  state at 300K was measured (by means of a taumeter developed for this purpose) as ~1.25 μsec. At 300K, the type II laser operates at a lower frequency (~1.0885 μ) than any other known neodymium laser. Orig. art. has: 1 table and 3 figures. [YK]

ASSOCIATION: Institut yadernoy fiziki Moskovskogo Gosudarstvennogo universiteta  
(Institute of Nuclear Physics, Moscow State University); Fizicheskiy institut  
Akademii nauk SSSR (Physics Institute, Academy of Sciences SSSR)

SUBMITTED: 03Feb65

ENCL: 00

SUB CODE: EC, 33

NO REF Sov: 002

OTHER: .008

ATD PRESS: 4013

DR

Card 2/2

UDOVENCHIK, V.I.

AID Nr 975-13 23 May

EPR OF Tm<sup>2+</sup> IN CaF<sub>2</sub> (USSR)

Pashinin, P. P., A. M. Prokhorov, and V. T. Udoventchik. Fizika tverdogo tela, v. 5, no. 4, Apr 1963, 1221-1222. S/181/63/005/004/045/047

Fluorite single crystals obtained by vertical zone melting in a vacuum were used to study the EPR of Tm<sup>2+</sup> in CaF<sub>2</sub>. The major portion of thulium entered the crystal lattice in the form of Tm<sup>3+</sup> ions rather than Tm<sup>2+</sup> ions; however, the Tm<sup>2+</sup> ion concentration was increased by x-ray irradiation of the crystals. EPR was observed at 9250 Mc with temperatures of 4.2 and 60°K. The spectrum consisted of two superfine lines, separated by  $228.8 \pm 0.3$  oe, whose position was independent of magnetic field direction. The superfine structure factor A for Tm<sup>169</sup> was found to be  $(367.5 \pm 0.5) \cdot 10^{-4}$  cm<sup>-1</sup>, and the g-factor to be  $3.452 \pm 0.002$ ; these values are very close to the theoretical. By using the two factors, along with the spin-orbital coupling factor obtained by Kiss, the nuclear magnetic moment  $\mu_I$  of Tm<sup>169</sup> was found to be  $-0.193 \pm 0.003$ . [BB]

Card 1/1

1 - Page 1 of 1 - 800 words - Page 1 of 1

Fluorite crystal with oxygen impurity  
Sr crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1985, page 11

TOPIC TAGS: fluorite crystal, optical property, oxygen impurity,  
samarium impurity, doping

ABSTRACT: The authors have studied the optical properties of fluorite

crystals doped with samarium and oxygen. The absorption coefficient and the refractive index were measured.

ABSTRACT

SECRET

ACCESSION NR: AP5003441

vapor, or by irradiation with gamma rays from  $\text{Co}^{60}$  - the zinc

ions in the crystal lattice are replaced by the dopant ions.

Although the doped fluorite crystallizes in four crystal-chemical

AUTHORS: Voron'ko, Yu. K.; Petko, V. V.; ~~UDOVICHENKO, YU. M.~~  
M. M.

TITLE: Optical properties of calcium fluoride doped with triply ionized ytterbium

JOURNAL: Optika i Sistemika (Optics and Optoelectronics), 1985, 167-213

EDS: Each type of crystal has centers of trigonal symmetry, type size 100 μm. The orientation of the crystal axes could not be determined. It was

large size

ACCESSION #11-A10003440

established that electronic transmission of layout centers corresponding to

more than one type. Orig. art. has 3 figures and 2 tables. (CS)

SUBMITTED BY (Type)

DATA ENTRY

AC REF SMT 911

ATD PREGO: 011

Core 1/2

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

order. Two types of spectra were obtained at room and nitrogen

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

ACCESSION NR: AP5014584



APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

VORON'KO, Yu.K.; OSIKO, V.V.; UDOVENCHIK, V.T.; FURSIKOV, M.M.

Optical properties of CaF<sub>2</sub> - Dy<sup>3+</sup> crystals. Fiz. tver. tela 7  
no.1:267-273 Ja '65. (MIRA 18:3)

1. Fizicheskiy institut imeni Lebedeva AN SSSR, Moskva.

VORON'KO, Yu.K.; KAMINSKIY, A.A.; KORNIYENKO, L.S.; OSIKO, V.V.; PROKHOROV,  
A.M.; ULOVENCHIK, V.T.

Study of the induced radiation from  $\text{CaF}_2\text{-Nd}^{3+}$  (type II) crystals  
at room temperature. Pis'. v red. Zhur. eksper. i teoret. fiz.  
1 no.2:3-7 Ap '65. (MIRA 18:10)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo  
universiteta i Fizicheskiy institut AN SSSR.

UDOVENKO, A.A., inzh.

Determining deformations of rubber-metal links. Trakt. i sel'khozmash.  
30 no.6:21 Je '60. (MIRA 13:11)

1. Novocherkasskiy politekhnicheskiy institut.  
(Couplings)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, A.A.

Radial deformations of silent blocks. Trudy NPI 107:83-85 '60.  
(MIRA 14:3)

{Rubber to metal bonding)  
(Deformations(Mechanics))

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

UDOVENKO, A. A.

Cand Tech Sci - (diss) "Study of silent blocks in the supports of motor vehicles." Novocherkassk, 1961. 13 pp with diagrams; (Khar'kov Polytechnic Inst imeni V. I. Lenin); 200 copies; price not given; (KL, 7-61 sup, 247)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, A.A.

Studying the pressure of the rubber pin bushing of the silent  
block. Trudy NPI 112:55-57 '61. (MIRA 14:9)  
(Automobiles--Engines (Compressed gas))

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

UDOVENKO, A.A.

Design of silent blocks for automobile suspensions. Trudy NPI 131:  
49-56 '62. (MIFA 16:3)  
(Automobiles-Springs)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, A.A.

Use of self-loading motortrucks. Trudy NPI 131:105-107 '62.  
(MIRA 16:3)  
(Motortrucks)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

UDOVENKO, A.A.

Investigating the coefficient of the rate of flow through annular  
orifices. Izv. vys. ucheb. zav.; neft' i gaz 8 no.4:65-66 '65.  
(MIRA 18:5)

1. Novocherkasskiy politekhnicheskiy institut im. S.Ordzhonikidze.

ACC NR: AP6023323

SOURCE CODE: UR/0114/66/000/004/0041/0041

AUTHOR: Udovenko, A. A. (Candidate of technical sciences, Docent)

ORG: none

TITLE: The discharge coefficient through annular slots

SOURCE: Energomashinostroyeniye, no. 4, 1966, 41

TOPIC TAGS: hydrodynamic theory, fluid viscosity, discharge coefficient

ABSTRACT: The article gives the results of an experimental determination of the discharge coefficient through annular slots with immovable outer walls and a rotating inner wall. The working fluids were various mineral oils, kinematic viscosity  $\nu \cdot 10^6$ , m<sup>2</sup>/sec at 50°C and a specific weight  $\gamma$ , newtons/m<sup>3</sup> at 20°. These oils included the following: machine oil 50, GOST 1707-51,  $\nu = 54$ ,  $\gamma = 8800$ ; machine oil 30, GOST 1707-51,  $\nu = 31.8$ ,  $\gamma = 8760$ ; spindle oil AU, GOST 1642-50,  $\nu = 12.6$ ,  $\gamma = 8720$ . The experimental apparatus (see Fig. 1) consisted of a chamber 1, a diaphragm 2, a shaft 3, and a pumping unit, and had provisions for measurement of the pressure, temperature, and liquid flow rate. The discharge coefficient was determined with two different positions of the shaft in the opening; concentric and with the greatest possible

Card 1/3

UDC: 532.54:66.045.1

L 04727-67

ACC NR: AP6023323

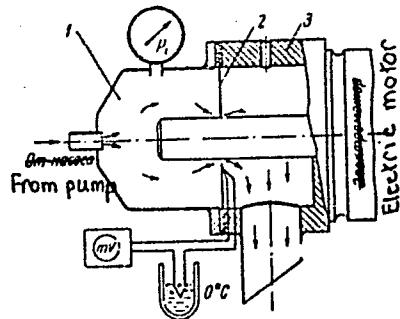


Fig. 1. Diagram of experimental apparatus

eccentricity. The temperature of the fluid was varied within the limits of 20-35°. Determinations were made of the kinematic viscosity and the density of the fluid. The discharge coefficient in annular slots,  $\mu$ , was determined by the known formula

$$Q = \mu f \sqrt{2g \frac{\Delta p}{\gamma}} \quad (1)$$

where  $Q$  is the fluid flow rate;  $\Delta p$  is the pressure drop;  $g$  is the

Card 2/3

L 06727-7

ACC NR: AP6023323

O  
acceleration due to gravity;  $f$  is the area of the annular slot. The experimental data were worked up according to the relationship

$$\mu = f \left( R_o; R_w; \frac{b}{s}; \frac{e}{s} \right). \quad (2)$$

in which  $R_o = vs/\sqrt{}$ ;  $R_w = us/\sqrt{}$ ;  $v$  is the axial velocity of the fluid;  $u$  is the peripheral velocity of the shaft;  $b$  is the thickness of the diaphragm;  $s$  is the radial gap between the shaft and the diaphragm;  $e$  is the absolute eccentricity;  $e/s$  is the relative eccentricity. Working up of the results indicates: 1) the criterion  $R_w$ , over a range of variation from 0 to 500, has practically no effect on the value of  $\mu$ ; 2) the form of the edges of the slot have practically no effect on the value of  $\mu$ ; 3) at  $b/s = 10-20$ , the effect of the relative eccentricity on  $\mu$  is very slight. Orig. art. has: 2 formulas, 2 figures and 1 table.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001

Card 3/3

L 24469-66 ENT(m)/ETC(f)/EPF(n)-2/ENG(m)/T/EWP(t) IJP(c) JD/JG/GS  
ACC NR: AT6010572 (N) SOURCE CODE: UR/0000/65/000/000/0029/0041

AUTHOR: Mil'man, Yu. V.; Rachek, A. P.; Trefilov, V. I.; Udovenko, A. A.; Firsov, S. A.; Yaremcuk, V. V.

ORG: Institute of Physics of Metals AN UkrSSR (Institut metallofiziki AN UkrSSR)

TITLE: Mechanism of plastic deformation in alloys of transition metals

SOURCE: AN UkrSSR. Mekhanizm plasticheskoy deformatsii metallov (Mechanism of the plastic deformation of metals). Kiev, Naukova dumka, 1965, 29-41

TOPIC TAGS: plastic deformation, cast alloy, phase transition, twinning, material fracture

ABSTRACT: The paper is a continuation of a previous work (Mil'man, Yu. V., Trefilov, V. I., Rachek, A. P., "Problems in the Physics and Science of Metals, 20", Naukova dumka, Kiev, 1964) devoted to the mechanism of plastic deformation and brittle fracture of alloys of elements in group VIA with other transition metals. The following alloy systems are studied: Cr-Mn, Cr-Ru, Cr-Fe, Cr-Os, W-Re, Mo-Re, Nb-Re and Mo-Ti. The alloys were studied in the cast state and in some cases were subjected to heat

Card 1/2

L 24469-66

ACC NR: AT6010572

3

treatment. The relationship between the packing flaw energy and the electronic structure of the alloy is analyzed. It is shown that both transition and nontransition metals conform to the Seger rule on high energies for packing defects in metals. The twinning ≠ slipping transition in alloys of transition metals is studied. All alloys of elements in group VIA with metals in groups VIIA and VIII A show a transition to twinning, while alloys with elements in group VIA (Mo-Ti alloys) show no twinning throughout the entire region of solid solutions with a bcc lattice under maximum loads. Experimental data show that alloying chromium, molybdenum and tungsten with metals of groups VIIA and VIII reduces the packing flaw energy and causes a transition to deformation by twinning (or to combined deformation by slipping and twinning). A brief survey of the literature shows no transition to twinning in alloys of group VIA with transition metals to the left of the chromium group in the periodic table. Orig. art. has: 8 figures.

SUB CODE: 11/ SUBM DATE: 14Nov64/ ORIG REF: 003/ OTH REF: 026

Refracting metals

27

Card 2/2ddo

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, G. A.

Furnaces of the glass and porcelain industry Moscow, 1935. 233 p.

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

UDOVENKO, G.A.

34015 UDOVENKO, G.A. I POLIK B.M.  
Ryekonstruktsiya Vannoy Pyechi  
Urshyel'skogo Zavoda Lyegkaya  
Prom-St', 1949 No. 9 S. 25-27

SO: LETOPIS' ZHURNAL'NYKH STATEY, VOL. 42, MOSKVA, 1949

1. SHIKOL'NIKOV, Ya. A.; UDOVENKO, G. A.; POLIK, B. M.
2. USSR (600)
4. Polik, B. M.
7. Inadequate textbook ("Technology of glass making." Reviewed by A. L.) Stek. i  
ker. 10, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

LOZHKOINA, N.N.; UDOVENKO, G.V.

Effect of potassium and chlorine on phosphorus absorption and  
phosphorus metabolism in corn plants. Dokl. AN BSSR 9 no.6:401-  
403 Je '65. (MIRA 18:9)

1. Belorusskiy nauchno-issledovatel'skiy institut zemledeliya.

UDOVENKO, G. V., Cand Agr Sci -- (diss) "On the Physiological  
Foundation for Using Fertilizers Together with Tubers in Planting <sup>the</sup> Potatoes." Mos, 1957. 11 pp (All-Union Sci Res Inst of Fertilizers and Agricultural Soil Science), 100 copies (KL, 49-57, 114)

USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M

Abs Jour : Ref Zhur Biol., N 12, 1958, 53610

Author : Udovenko, G.V.

Inst : The All-Union Fertilizer and Soil Science Institute

Title : Fertilizer Application into the Planting Holes During  
the Sowing of Potatoes.

Orig Pub : Udobreniye i urozhay, 1957, No 4, 53-55

Abstract : According to studies made at the Plant Nutrition Laboratory of the All-Union Fertilizer and Soil Science Institute in planting potato by means of the SKG-4 potato planter, the greatest increases in the yield are obtained with the simultaneous placement of nitrogen and phosphorus fertilizers into the pocket. Addition of potassium fertilizers decreased the yield. For middle and late varieties, 50 kg of  $N_c$  and 1 c of  $P_c$  should be introduced

Card 1/2

- 36 -

USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53610

into the pockets at planting. For early varieties, the N<sub>c</sub> dose is increased to 1 c. It is better to introduce potassium before planting or during late supplementary dressings. -- L.N. Chermnykh

Card 2/2

17(4), 30(1)  
AUTHORS:

Kalinkevich, A. F., Udovenko, G. V.

SOV/20-126-3-63/69

TITLE:

On the Problem of Influence of Nutrition Conditions on the  
Content of Amino Acids in Plants (K voprosu o vliyanii usloviy  
pitaniya na soderzhaniye aminokislot v rasteniyakh)

PERIODICAL:  
(USSR)

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 3, pp 684-687

ABSTRACT:

The nitrogen flowing from the soil into the root system is very quickly synthesized to amino acids. Alanine is at first produced, then dicarboxylic acids (Ref 2). Only afterwards, in the course of transamination, other, more complicated, amino acids are produced. Under normal conditions, not mineral nitrogen but nitrogen in the form of amino acids (Refs 1, 2) flows into the organs above ground (stem, leaves). Proteins are synthesized in the leaves from these amino acids. The degree of supply to plants with elements of mineral nutrition affects the formation of individual amino acids. Thus, a lack of phosphorus reduces the content of free amino acids in the plant (Ref 3), a lack of potash increases it (Refs 4, 6). Also chlorine increases this content (Refs 7, 8). On the other hand, the investigation of the leaves (Refs 4, 6) cannot characterize with sufficient accuracy

Card 1/4

On the Problem of Influence of Nutrition Conditions  
on the Content of Amino Acids in Plants

SOV/20-126-3-63/69

the change of the original synthesis of amino acids. For, on one hand, intense transamination and desamination processes occur in the leaves, on the other hand - the inclusion processes of the amino acids into the protein molecule. As the investigation of the emergent sap of hemp (the plant chosen for the test) was not possible because of its small quantity, the lower parts of the stem were investigated which also "reflect" the content of free amino acids in the roots (Ref 1). In the case of corn, the 2 lower internodes were used. Cystine, ornithine, lysine, histidine, asparagine, arginine, asparaginic and glutamic acids, serine, glycine, alanine, proline, tyrosine, tryptophane, valine, phenyl alanine, leucine, norleucine, and another not identified amino acid were detected in a free state in the hemp stems. There was not a trace of glutamine. Asparaginic acid, valine, phenyl alanine and asparaginic amide predominate quantitatively. Chlorine increases somewhat the total content of free amino acids in the hemp stems; in individual acids of the lysine, aspartic acid and tyrosine. At an intensification of potash nutrition, the content of free acids increases even more (Table 1, Variants Nrs 3 and 4).

Card 2/4

On the Problem of Influence of Nutrition Conditions  
on the Content of Amino Acids in Plants

SOV/20-126-3-63/69

On account of the changes, the authors think that the free amino acids flowing from the roots into the leaves are quickly involved in the further synthesis and in the protein molecule. Besides, the increase in individual acids by sulphur with an ammonia- and nitrate- as well as sulphate-nutrition (Table 1, Variants Nrs 2, 5, and 1, 2, 5 respectively) is discussed. Also glutamine, threonine,  $\alpha$ - and  $\beta$ -alanine as well as  $\gamma$ -amino-butyric acid were observed in a free state in the corn stems. Ornithine, histidine, tryptophane, phenyl alanine, and proline were missing. The content of free amino acids is much changed in the 2nd half of the vegetation period in dependence on potash nutrition both in hemp and in corn. In case of potash hunger, the content of all acids decreases very much so that some of them cannot be detected at all (Table 2). With the

Card 3/4

On the Problem of Influence of Nutrition Conditions  
on the Content of Amino Acids in Plants

SOV/20-126-3-63/69

aging of plants, the content of free amino acids in the stems decreases considerably. There are 2 tables and 8 references, 5 of which are Soviet.

ASSOCIATION: Vsesoyuznyy institut udobreniy i agropochvovedeniya  
(All-union Institute of Fertilizers and Agricultural Soil Science)

PRESENTED: February 25, 1959, by A. L. Kursanov, Academician

SUBMITTED: October 21, 1958

Card 4/4

UDOVENKO, G.V. [Udovenka, H.V.]

New experimental data supporting the adsorption theory of the  
cellular permeability of higher plants. Vestsi AN BSSR. Ser.  
biial. nav. no.3:24-32 '63 (MIRA 17:7)

UDOVENKO, G.V.; IVANOV, N.P.

Effect of microelements on the absorption of chlorine by plants.  
Dokl. AN BSSR 8 no. 1:60-62 Ja '64. (MIRA 17:5)

1. Belorusskiy nauchno-issledovatel'skiy institut zemledeliya.  
Predstavлено академиком AN BSSR V.I.Shempelem.

UDOVENKO, G.V.

Uptake, reutilization and some aspects of the physiological effect  
of chlorine in plants. Izv. AN SSSR, Ser. biol. no. 3: 368-377. Minsk,  
'65. (MIRA 18:5)

I. Belorusskly nauchno-issledovatel'skly institut zemledeliya. Minsk.

UDOVENKO, G.V.

Relative rate of the synthesis of amino acids in plant leaves.  
Fiziol. rast. 12 no.5:932-935 S-0 '65. (MIRA 19:1)

l. Belorusskiy nauchno-issledovatel'skiy institut zemledeliya  
Akademii sel'skokhozyaystvennykh nauk BSSSR, Minsk.

L 25790-66

ACC NR: AP6015916

SOURCE CODE: UR/0216/65/000/003/0368/0377

29

B

AUTHOR: Udovenko, G. V.

ORG: Belorussian Scientific Research Institute of Agriculture, Minsk (Beloruskiy nauchno-issledovatel'skiy institut zemledeliya)

TITLE: Uptake, re-utilization, and certain aspects of the physiological effect of chlorine in plants

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 3, 1965, 368-377

TOPIC TAGS: radioisotope, plant physiology, chlorine, plant chemistry, plant growth, plant metabolism

ABSTRACT: The article presents the results of research conducted in the radio-isotope laboratory of the Belorussian Scientific Research Institute of Agriculture on the physiological role of chlorine. Seeds and plants of various legumes and grains were studied with Cl<sup>36</sup>. In the first days of seed sprouting, chlorine is taken up in the plant with exceptional intensity and moves rapidly to all organs. Most accumulates in those organs where the level of synthetic processes is highest at the moment of uptake. A large part of the chlorine arriving in a leaf is fixed in its tissues and is retained until the leaf dies. Little chlorine from the leaves is re-utilized. Much less chlorine is fixed in the roots and stalk, and therefore more is available for redistribution to other organs and parts of the

Card 1/2

Z  
UDC: 581.1

L 25790-66

ACC NR: AP6015916

plant. The chlorine taken up into the plant has a suppressive effect on growth processes, accelerates leaf aging and reduces yield. Grains are less susceptible to the effect of chlorine than legumes. Chlorine increases the hydration of tissues and lessens plant transpiration. Chlorine was observed to have a marked effect on nitrogen metabolism in the plants; this was indicated by a reduction of total and protein nitrogen and by an increase in the content of free amino acids in the leaves; specifically, dicarboxylic amino acids and their amides. Orig. art. has: 4 figures and 8 tables. [JPRS]

SUB CODE: 06, 18 / SUBM DATE: 12Jul62 / ORIG REF: 014 / OTH REF: 008

Card 2/2 CC

UDOVENKO, G.V.; IVANOV, N.P.

Effect of the general level of mineral nutrition on the intensity  
of chlorine uptake in plants. Dokl. AN SSSR 152 no.2:489-491  
(MIRA 16:11)  
S '63.

1. Nauchno-issledovatel'skiy institut zemledeliya, Minsk.  
Predstavлено академиком A.L. Kursanovym.

UDOVENKO, I., gvardii leytenant; SYTYY, N., kand.tekhn.nauk; GUSAROV, V.,  
polkovnik.

Making shaft pits with explosives. Voen.-inzh.zhur. 101 no.12:28-35  
(MIRA 10:12)  
D '57. (Fortifications) (Explosives, Military)

KOZHEMYAKIN, K.G.; UDOVENKO, I.P.; KANIVETS, A.P.

Timbering in horizontal mining at the Krivoy Rog Basin mines.  
Bezop. truda v prom. 2 no.7:17-18 J1 '58. (MIRA 11:9)

1. Krivorozhskiy nauchno-issledovatel'skiy institut gornorudnoy  
promyshlennosti.  
(Krivoy Rog basin--Mine timbering)

3402 UDOVENKO I. P. AND ROMANOV U. S.

Mnogomolotkovoe burenije tatsionnye molotkami po metodu prokhodchika  
P. I. Chaykovskogo, M Metallurgizdat, 1954. 40s s chert 20 sm. (Feredovye  
metody truda) 2,000 ekz 85 k na obl avt ne ukazany (54-57169) p. 622.34  
622.235.1 st + 622.235.1 st.

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

VASHCHENKO, V.S.; UDOVENKO, I.P.; SHMALIY, I.P.

Interchangeable SVP-3M section in collapsible supports.  
Met. i gornorud. prom. no.3:72-74 My-Je '64.

(MIRA 17:10)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, I.P., inzh.; SKORKIN, A.F., inzh.; LYSAKOVSKIY, V.A., inzh.

Testing supports of double-groove sections and pliable frames.  
(MIRA 18:5)  
Gor. zhur. no.4:30-32 Ap '65.

1. Nauchno-issledovatel'skiy gornorudnyy inatitut, Krivoy Rog.

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

NAFTULIN, M.E.; SHVETS, Yu.A.; UDOVENKO, K.A.; DZHANUTSTSO, K.A.;  
IVASHCHENKO, P.M.; BELEN'KIY, V.I.; BYCHENKO, N.A.

Coloring filmlike layers of asbestos-cement sheet products. Stroi.  
mat. 6 no.5:24-25 My 60. (MIRA 13:7)  
(Asbestos cement)  
(Coloring matter)

NAFTULIN, M.E.; UDOVENKO, K.A.

Asbestos-cement boxlike wall panels. Suggested by I.M.Naftulin,  
K.A.Udovenko. Rats.i izobr.predl.v stroi. no.16:35-37 '60.  
(MIRA 13:9)

1. Po materialam zavoda izolyatsionnykh i asbestosotsementnykh  
materialov Khar'kovskogo sovnarkhoza.  
(Windows) (Building blocks)

UDOVENKO, L. F., Candidate Agric Sci (diss) -- "Analysis of the economic effectiveness of calving of cows at various seasons under the conditions of Kurgan Oblast". Moscow, 1959. 19 pp (Moscow Vet Acad of the Min Agric USSR), 140 copies (KL, No 22, 1959, 119)

UDOVENKO, L N

129-58-5-15/17

Scientific-Technical Conference on Metallurgy and Heat Treatment, Khar'kov -1948

Curie points.

Engineer L. N. Udoventko (Works for Building Transport Machinery) dealt with physical methods of control, describing certain results of introduction of magneto-electric instruments for controlling the quality of heat treatment / practical introduction of radiographic methods of searching for defects of large size castings and of weld joints.

Candidate of Technical Sciences A. K. Beskrovniy (KhPI) reported on new data relating to the inoculation of metals. The higher the intercontact difference of the potentials between the solid and the liquid phase the more disperse will be the obtained structure. If the

inoculating agent forms with the metal an unlimited solid solution, its action will be the more intensive the lower its intercontact potential. This assumption was verified on inoculated zinc, tin, aluminium and other metals.

Engineer B. I. Movshovich (KhTZ) in his paper "Obtaining High Mechanical Characteristics of Plunger Pairs Made of

Card 15/20 the Steel KhVG in the Case of a Shortened Heat Treatment

*Udovenko M.I.*

AUTHOR: Udovenko, M.I.

130-1-14/17

TITLE: Machine for Cleaning Tinned Strip (Mashina dlya ochistki  
luzhenoy polosy)

PERIODICAL: Metallurg, 1958, No.1, pp. 30 - 32 (USSR)

ABSTRACT: The author describes the development of mechanisation  
in the cleaning of hot-dip tinned strip at the Zaporozhstal'  
Works. The original arrangement was unsatisfactory and  
required final manual cleaning by over 350 workers. All the  
numerous cleaning devices tried were unsatisfactory and the  
author describes a cleaning machine (Fig.3) proposed by him,  
which overcame the disadvantages. In this, felt-covered  
segments to which a reciprocating motion is mechanically  
imparted are used to secure movement of siftings over both  
surfaces of the tinned strip as it passes through the machine.  
An editorial note mentions that simpler machines not using  
siftings are being developed. There are 3 figures.

ASSOCIATION: Zaporozhstal' Metallurgical Works (Zavod Zaporozhstal')

AVAILABLE: Library of Congress  
Card 1/1

UDOVENKO, N.

New developments in the organization of timekeeping records.  
Bukhg.uchet. 14 [i.e. 16] no.8:39-42 Ag '57. (MLRA 10:8)

1.Glavnyy bukhgalter Taganrogskogo kombaynovogo zavoda, Taganrog.  
(Taganrog--Combines (Agricultural machinery))

UDOVENKO, N.

Time-board system without timekeepers. Sots.trud no.6:113-116  
(MIRA 10:7)  
Je '57.

1. Glavnnyy bukhgalter Taganrogskogo kombaynovogo zavoda.  
(Taganrog--Timekeeping (Labor))

UDOVENKO, N.

Accounting system that facilitates the organization of labor and  
production. Sots. trud no.8:118-122 Ag '58. (MIRA 11:9)

1. Glavnnyy bukhgalter Taganrogskogo kombaynovogo zavoda.  
(Taganrog—Combines) (Agricultural machinery)—Accounting)

KOVALENKO, Yevgeniy Vasil'yevich; UDOVENKO, Nikolay Antonovich;  
ZARUDNYY, N., red.

[Use of calculating machines in the standard method of  
accounting] Primenenie schetnykh mashin pri normativ-  
nom metode ucheta. Moskva, Finansy, 1965. 50 p.  
(MIRA 18:8)

KUDRYASHOV, V.N., kandidat tekhnicheskikh nauk; UDOVENKO, N.G., inzhener.

Conveyers for preliminary finishing of fine glassware. Leg.prom.  
15[i.e. 16] no.6:11-13 Je '56. (MLRA 9:8)  
(Gusev--Glassware) (Conveying machinery)

1 28 10-65 RPA(s)-2/FMT(1) "SMT(s)/EEG(t)/EWP(1)/EMF(e)" Pg-4/Ft-10 (JP's)

SG/4

ACCESSION NR: AP5005296

E/0181/65/007/002/0524/0529

AUTHOR: Mashkovich, M. D.; Udoenko, I. G.

TITLE: Dielectric properties of glasses of the system  $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$  15

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 524-529

TOPIC TAGS: glass, dielectric property, dielectric constant, dielectric loss angle

ABSTRACT: The dielectric constant and the tangent of the loss angle were measured at frequencies 10<sup>9</sup> and 10<sup>10</sup> cps in glasses of the system  $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$  ( $\text{Mg} = \text{Mg}, \text{Ca}, \text{Sr}, \text{Ba}$ ). The  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ , and  $\text{MgO}$  contents were 50--70, 12.5--19.5, and 10.5--23.0 molar per cent, respectively. The dielectric properties were measured with a bridge at 10<sup>9</sup> and 10<sup>10</sup> cps, and the tangent of the loss angle was measured with a bridge

Card 1/2

L 38532-65

ACCESSION NR: AP5005296

data, together with calculations of the electronic and ionic polarization for several magnesium and barium glasses, shows that the divalent ions and the co-ordinations of the Al<sup>3+</sup> ions in the glass have a strong effect on the dielectric properties. Orig. art. has: 4 figures, 2 formulas, and 1 table.

ASSOCIATION: Osvetarske vjezdy nauchno-tekhnicheskogo instituta elektrorakushenija

MR REF Sov: 009

OTHEP: 004

Card 2/21/8

YURGENSON, Petr Borisovich; UDOVENKO, N.I., red.

[Along the unknown paths of Siberia] Nevedomymi tropami  
Sibiri. Moskva, Izd-vo "Mysl'," 1964. 45 p. (MIRA 17:8)

BYCHKOV, D.V., doktor tekhn.nauk, prof.; MIROV, M.O.; LUNEV, Vasiliy Ivanovich, kand.tekhn.nauk, dots.; IVANOV, Grigoriy Mikhaylovich, kand.tekhn.nauk.; PAVLOV, B.P., prof., doktor tekhn.nauk, ratsenzent; KOBETS, L.G., kand.tekhn.nauk, ratsenzent; UDOVENKO, S.A., inzh., ratsenzent; BOGOMOLOV, G.I., inzh., ratsenzent; BORODINA, T.S., red., izd.-va; KAPLAN, M.Ya., red.izd.-va; PERSON, M.N., tekhn. red.; UL'KINA, Ye.A., tekhn.red.

[Engineering mechanics] Tekhnicheskaja mekhanika. Pod obshchei red. D.V.Bychkova. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit. Pt.1. Bychkov, D.V., and M.O.Mirov [Theoretical mechanics] Teoreti-cheskaja mekhanika. Izd. 2-oe. 1957. 282 p. Pt.2. Lunev, V.I. [Resistance of materials] Soprotivlenie materialov. Izd. 2-oe, perer. 1957. 255 p. Pt.3. Ivanov, G.M. [Statics of structures] Statika sooruzhenii. 1957. 226 p. (MIRA 11:2)  
(Mechanics, Applied) (Strength of materials)

MAN'KOVSKAYA, N.K., Kandidat khimicheskikh nauk; Udovenko, S.A., inzhener.

Determination of free sulfuric acid in the presence of water-soluble fatty acids. Masl.-zhir.prom. 21 no.3:30-32 '56. (MLRA 9:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Man'kovskaya); 2. Shebekinskiy kombinat SZhK i ZhS. (for Udovenko)  
(Acids, Fatty) (Sulfuric acid)

UDOVENKO, S.A., inzh.; BABANSKIKH, L.I., inzh.

Methods for determining the content of dicarboxylic acids.  
Masl. - zhir. prom. 27 no.12:27 D '61. (NIRA 14:12)

1. Nauchno-issledovatel'skiy institut sinteticheskikh  
zhirozameniteley i moyushchikh sredstv.  
(Acids, Fatty)

IGONON, P.G., inzh.; SVITKIN, V.V., inzh.; MITROFANOV, M.G., kand.tekhn.nauk; SLEPISOV, Yu.S., inzh.; KOLOZHVARI, A.A., inzh.; PASHENKO, M.A., inzh.; ZHIVOLUPOV, M.A., inzh.; Prinimali uchastiye: MUSHENKO, D.V.; TSYSKOVSKIY, V.K.; SHCHEGLOVA, TS.N.; FREYDIN, B.G.; PYL'NIKOV, V.I.; LEVINA, M.I.; LEVIN, A.I.; LUR'YE, Ye.I.; BAYKINA, T.A.; UDOVENKO, S.A.; MARCHENKO, T.A.

Effect of the method of liquid paraffin oxidizing on the yield and quality of the obtained fatty acids. Masl.-zhir.prom. 28 no.11:20-23 N '62. (MIRA 15:12)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut (for Igonin, Svitkin, Mirtofanov, Sleptsov, Kolozhvari, Pashenko, Zhivolupov).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov (for Mushenko, TSyskovskiy, Shcheglova, Freydin, Pyl'nikov, Levina, Levin).3. Lengiprogaz (for Lur'ye, Baykina). 4. VNIISINZh (for Udoenko, Marchenko).

(Paraffins)

(Acids, Fatty)

MAN'KOVSKAYA, N.K., kand.khimicheskikh nauk; UDOVENKO, S.A., inzh.

Dicarboxylic acids contained in commercial synthetic fatty acids.  
Masl.-zhir.prom. 28 no.4:25-30 Ap '62. (MIRA 15:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh  
zhirozameniteley i moyushchikh sredstv.  
(Acids, Fatty)

MAN'KOVSKAYA, N.K.; UDOVENKO, S.A.; ROMANOVA, L.A.

Composition and properties of vat residues of synthetic  
fatty acids used as plasticizers of coumarone tiles. Khim.i  
tekhn. i topl.i masel 7 no.6:22-26 Je '62. (MIRA 15:7)  
(Acids, Fatty) (Plasticizers)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, S.A.; BABANSKIKH, L.I.

Using the method of potentiometric analysis for determining carbonyl  
numbers in dark-colored products. Trudy NISZHMIMSa no.3:89-90 '62.  
(MIRA 16:12)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

PERCHENKO, A.A., kand. tekhn. nauk; MARCHENKO, M.A., inzh.;  
UDOVENKO, S.A., inzh.; SHAKHROVA, N.P., inzh.

Thermal processing of residual acids after preliminary saponification. Masl.-zhir. prom. 29 no.3:23-25 Mr '63.  
(MINA 16:4)

1. VNIISINZh.  
(Acids, Fatty)

PERCHENKO, A.A., kand.tekhn.nauk; UDOVENKO, S.A., inzh.; MARCHENKO, M.A.,  
inzh.; SHAKHROVA, N.P., inzh.

Thermal refining of synthetic fatty acids. Masl.-zhir.prom. 29  
no.9:16-18 S '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut  
sinteticheskikh zhirozameniteley.

ACCESSION NR: AP4009782

S/0065/64/000/001/0023/0026

AUTHORS: Man'kovskaya, N.K.; Udovenko, S.A.; Makarov, S.V.

TITLE: Synthetic fatty acids prepared by carbon dioxide decom-position of soaps

SOURCE: Khimiya i tekhnologiya topliv i masei, no. 1, 1964, 23-26

TOPIC TAGS: monocarboxylic acids, dicarboxylic acids, soap decom-position, synthetic fatty acids

ABSTRACT: Decomposition of technical soaps by carbon dioxide under pressure (not described) permits the preparation of synthetic fatty acids different from the commercial grades prepared by distillation. The reason for this difference is the concentration in the first fraction of all unsaponified compounds left after thermal processing; all dicarboxylic acids concentrate in the last fraction. To demonstrate the results of soap decomposition by carbon dioxide, the SZhK and ZhK technical soaps made by the Shebekinskiy Kombinat, were treated in an experimental installation in three steps, pro-

Card 1/2

ACCESSION NR: AP4009782

ducing five fractions without distillation. The demonstration showed that the first fraction contained 60% of C<sub>21</sub>-C<sub>25</sub> acids; the second - 57% C<sub>17</sub>-C<sub>20</sub> acids; the third - 85% C<sub>10</sub>-C<sub>16</sub> acids. Their purity is higher than that of commercial acids prepared by distillation. The fourth fraction is a 90% concentrate of C<sub>7</sub>-C<sub>20</sub> acids containing all resinous substances from which pure acids can be separated by distillation at 1480 and 5 mm Hg. The fifth fraction is a mixture of 35-40% monocarboxylic C<sub>4</sub>-C<sub>6</sub> acids and 50-55% dicarboxylic C<sub>8</sub> - C<sub>16</sub> acids. These acids can be readily separated by simple distillation since the former boil up to 1200, while the latter in the 205-2450 range at 5 mm Hg. Orig. art. has 5 figures, no formulas, 2 tables.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CH

NO REF Sov: 002

OTHER: 000

Card 2/2

MAN'KOVSKAYA, N.K.; PONOMARENKO, I. Ya.; UDOVENKO, S.A.; MAKAROV, S.V.;  
KHLUD, M.L.

New method for separating and dividing synthetic fatty acids  
into fractions. Khim. i tekhn. topl. i masel 9 no. 6:52-57  
(MIRA 17:7)  
Je'64

1. UkrNIIgiproneft' i Vsesoyuznyy nauchno-issledovatel'skiy  
i proyektnyy institut sinteticheskikh zhirozameniteley.

UDOVENKO, V.

Location of the most important new construction projects of  
the sixth five-year plan in the eastern regions of the Soviet  
Union. Vop.ekon. no.9:155-159 S '56. (MLRA 9:10)

(Siberia--Economic geography)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, V.

Economic development of the eastern regions of the U.S.S.R. from  
1959-1965. Vop. ekon. no.5:128-136 May '59. (MIRA 12:9)  
(Russia, Eastern--Economic policy)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8

UDOVENKO, V.

Economic development of northern regions. Vop. ekon. no.12:  
122-124 D '62.  
(MIRA 16:1)

(Russia, Northern--Economic policy)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001857820002-8"

32965  
S/146/61/004/006/004/020  
D249/D301

//. 9/00

AUTHORS: Barutkin, I. N., Lyashenko, T. I. and Udovenko, V. F.

TITLE: An instrument for determining the iron content in engine oil

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Prirodstro-  
yeniye, v. 4, no. 6, 1961, 26-30

TEXT: An instrument ZhM-1 (ZhM-1) has been developed for measuring small concentrations of iron particles in internal-combustion engine lubricants. Its operation is based on measurement of the magnetic permeability of oil. The minimum concentration of iron which can be measured is 0.001%. The instrument consists of a supply unit and an induction unit, the former comprising two sole-noids  $K_1$ ,  $K_2$ , a voltmeter and a rheostat, the latter two inductance coils  $K_3$ ,  $K_4$  and an indicator. With a perfectly symmetrical arrangement of the coils no current flows through the galvanometer. However, if oil containing iron particles is introduced into

Card 1/3

X

An instrument for determining ...

32965  
S/146/61/004/006/004/020  
D249/<sup>w</sup>301

$K_1$  and "pure" oil into  $K_2$  the galvanometer current is  $I_0 = \omega \Delta M I_m / Z$ , where  $\Delta M$  - increment of mutual inductance of the coils  $K_1$  and  $K_3$  due to the presence of iron.  $I_m$  - peak value of primary current;  $Z$  - total impedance of the secondary circuit. The author deduces for the iron content  $m_{ir} = C_{ind}$ , where  $\alpha$  is the deflection of the galvanometer and  $C_{in}$  the constant of the instrument  $C_{in} = 1/S_g S_c$ ,  $S_g$  being the sensitivity of the galvanometer and  $S_c$  that of the circuit;  $S_c = I_m \omega \mu_{ir}^* n_1 n_3 / z \rho$ ;  $\mu_{ir}^*$  = iron permeability;  $n_1 n_3$  - number of turns per unit length of coils  $K_1$  and  $K_3$ ;  $\rho$  - iron density. For the actual instrument the constant  $C_{in}$  is 1 mg/mm or 0.001% iron/mm deflection. Since it is impossible to obtain in practice a perfectly symmetrical arrangement of coils, a compensating unit must be used. This consists of a) a movable steel needle, whose depth of penetration in one pair of coils is controlled

X

Card 2/3

An instrument for determining ...

32965  
S/146/61/004/006/004/020  
D249/D301

by means of a micrometer screw and, b) two variable resistors  $r_1$  and  $r_2$ . The main source of error with the instrument described is the variation of the size of iron particles. Other errors are due to voltage and frequency fluctuations, non-sinusoidal form of the current, and interference. The effect of these errors can be minimized by using strong magnetic fields, e.g. of the order of  $10^4$  A/m. This article was recommended by the Kafedra Fiziki (Department of Physics). There are 3 figures, 1 table and 1 Soviet-block reference.

ASSOCIATION: Khar'kovskiy avtomobil'no-dorozhnyy institut (Khar'kov Automobile-Highway Institute)

SUBMITTED: April 19, 1961

Card 3/3

X

3

S/828/62/000/000/001/017  
E039/E420

AUTHORS: Kaplan, G.Ye., Yagodin, G.A., Moiseyev, S.D.,  
Dmitriyeva, L.P., Moskovaya, O.A., Chekmarev, A.M.,  
Sevost'yanova, E.N., Udovenko, V.P.

TITLE: The separation of zirconium and hafnium by means of  
organophosphorous compounds, amines and other  
extraction agents

SOURCE: Razdeleniye blizkikh po svoystvam redkikh metallov.  
Mezhdunar. konfer. po metodam razdel. blizkikh po  
svoystv. red. metallov. Moscow, Metallurgizdat, 1962,  
28-41

TEXT: Although large separation coefficients can be obtained by  
the use of mixed nitric and hydrochloric acids the process is not  
favoured because of corrosion difficulties and the large quantity  
of acids required. The results of experiments on the extraction  
of these elements from a sulphuric acid medium in the presence of  
different extraction agents is therefore examined. It is shown  
that diisoamyl-ether-methylphosphonium acid ( $i\text{C}_5\text{H}_{11}\text{O})_2\text{POCH}_3$   
(DAMPA) is a more powerful complex forming agent than

Card 1/2

The separation of zirconium ...

S/828/62/000/000/001/017  
E039/E420

3

tributylphosphate (TBP). The separation and distribution coefficients for Zr and Hf are 24.6 and 3.2 respectively when using 10% DAMPA in  $H_2SO_4$  solution in the presence of thio-cyanic acid, while for 40% TBP in the same medium the corresponding coefficients are 21.6 and 2.6. An increase in the concentration of TBP is undesirable as it leads to increased viscosity and a large loss of extraction agent. It should be noted however that the re-extraction of DAMPA is more difficult than for TBP. Diphenylphosphoric acid extracts Zr and Hf from  $H_2SO_4$  solution with a separation coefficient 3 to 10. Other extraction agents of this type are also tested. Tests are also made on the use of tri-n-octylamine and in this case as the concentration of  $H_2SO_4$  is increased the separation coefficient for Zr and Hf passes through a maximum value of 12 at about 1 normal  $H_2SO_4$  and then falls to a steady value of about 10 for further increase in the  $H_2SO_4$  concentration. Details are given of the constitution of the organic and aqueous phases and the effect of acidity on the separation coefficient. There are 11 figures and 3 tables.

Card 2/2

## PHASE I BOOK EXPLOITATION

245

Udovenko, Vitaliy Grigoryevich

Dal'niy Vostok; ekonomiko-geograficheskaya kharakteristika (The Soviet Far East;  
Economic and Geographic Features) Moscow, Geografgiz, 1957. 246 pp.  
20,000 copies printed.

Ed.: Lyubimov, I. M.; Tech. Ed.: Kosheleva, S. M.; Map Ed.: Mal'chevskiy, G. N.

PURPOSE: This is a manual on geographic and economic conditions of the Soviet Far East; the book is intended for teachers, geographers and propagandists.

COVERAGE: The author defines the "Soviet Far East" as a territory comprising two krays (Primorskiy and Khabarovskiy) and four oblasts (Amurskaya, Sakhalinskaya, Magadanskaya and Kamchatskaya) and representing altogether one seventh of the USSR. This territory, treated here as an economic entity, is unique in its pattern of flora, ranging from almost barren polar islands in the north to rampant subtropical forests in the south. The first chapter surveys the geographic features of this area, including mineral deposits and chapters II and III provide a historical background dealing with the colonization and settling of the region. Chapter IV summarizes the economic endeavors of the Soviet Far East as a whole, and

Card 1/5

The Soviet Far East, Economic and Geographic Features (Cont.) 245

chapter V is concerned with the six basic administrative units individually. The entire region had a population of 4,300,000 in 1956. Chapter IV includes tables on areas under cultivation and on animal husbandry. Among the shipyards mentioned are those at Vladivostok, Nikolayevsk, Petropavlovsk, and Komsomol'sk. Some scattered data on the output and locations of establishments or the electrical, coal and oil industries of the area are given. An oil refinery at Khabarovsk is mentioned, but not at Komsomol'sk, although the existence of such a refinery is indicated on one of the maps. The author goes into some detail describing individual cities, but hardly mentions their industrial enterprises. There are 35 photographs, 20 maps, and 10 tables in the text, and 21 tables in the appendix. This appendix is perhaps the most valuable part of the book. There are 52 references, all Soviet.

TABLE OF CONTENTS:

|                        |   |
|------------------------|---|
| Foreword by the Author | 3 |
| Introduction           | 5 |
| Card 2/5               |   |